Heretofore, molds, plungers and other glass contacting elements of glass forming equipment have been heated, prior to forming glassware, by depositing gobs of glass on the surfaces and allowing the glass to heat the glass contacting element to a good[,] working temperature. This heating has been augmented, in some cases, with steam or the combustion of natural gas or methyl acetylene. In glass forming equipment with cast iron glass contacting elements, 600° F is a good working temperature. More recently, molds, plungers and other glass contacting elements of glass forming equipment have been made from stainless steal which has a much higher working temperature of about 800° F. The prior art reliance on gobs of glass, with or without supplemental heating, made the time required to heat glass contacting elements to a suitable working temperature dependent upon the mass of the glass. Typically, this takes about thirty minutes.

Today, some glass contacting elements are heated by contact with glass gobs and the combustion of a mixture of combustible gases, namely, 75% by volume of MAPP gas, [a mixture of methlacetylene, propadlene and propylene] which is commercially available from Petromont of Canada, and 25% by volume of propane. Better heating of glass contact surfaces is needed, however, especially in view of the tendency toward shorter runs and longer downtime while glass contacting elements are brought up to a suitable working temperature according to the prior art.

Also, because of the increase in BTU content of the improved hydrocarbon mixture, the present invention and discovery shall applies to and has utility for any glass contacting surface. The added heat value acts as a pre-[heart] heat of the glass contacting surface. Then, a secondary by-product of carbon actually insulates the glass contacting surface and acts as a thermal barrier. Some examples would be ring and plunger and molds of press machines, H-28 machines, I.S. machines, CRT machines, panel machines, spinning machines, formers, conveyors, Lehr chains, vacuum cups, and dead plates. As the basic scientific principle of this invention remains the same, it applies to but is not limited to any of the above mentioned examples.

If propagation of carbon skeletons is too abundant, it is advisable to turn off the MAPP gas for a predetermined period of time, e.g., one or two turns of the machine, to restore the mold to a clean condition[)].

Example 2- MAPP[S] mixed with natural gas

1. In ring and plunger assemblies, the MAPP gas is mixed with approximately 40% natural gas to ensure the best heat control to eliminate the condition called glass press-up.